



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,247	02/07/2005	Rein Tammik	9300100-2001- -	9091
<div>7590 01/10/2008</div> <div>Ronald R Santucci Frommer Lawrence & Haug 745 Fifth Avenue New York, NY 10151</div> <div>EXAMINER MERCIER, MELISSA S</div> <div>ART UNIT PAPER NUMBER</div> <div>1615</div> <div>MAIL DATE DELIVERY MODE</div> <div>01/10/2008 PAPER</div>				

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/507,247

Applicant(s)

TAMMIK, REIN

Examiner

Melissa S. Mercier

Art Unit

1615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 50-52, 54-58 and 67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 50-52, 54-58, 67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt of Applicants Remarks and Amended Claims filed on October 25, 2007 is acknowledged. Claims 50-52, 54-58, and 67 remain pending in this application. Rejections and/or objections not reiterated from previous Office Actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 50-52, 54-58, and 67 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has not provided adequate written description for the new limitation of "wherein the outermost layer of the pigment assembly is a metal oxide..." Applicant points to Figures 6-7 and 10 and pages 7 and 14, lines 15-17 and 6-10, respectively as evidence of support. The examiner disagrees. The figures demonstrate the UV transmittance measurements of compositions, not the location of the oxide layer and the specification passages

additionally do not disclose the location or requirement of the outermost layer being the metal oxide. This is a new matter rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 67 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyoshi et al. (US Patent 5,968,531) in view of Kimura et al. (US Patent 5,522,923).

Miyoshi discloses "a particulate composite powder wherein each composite powder particle comprises a substrate particle surrounded by fine particles of metal oxide bound to the surface of the substrate particle by a binding agent containing at least one of metallic soap and wax, the amount of fine particles of metal oxide being between 10 and 30 wt % based on the total weight of substrate particles, fine particles

of metal oxide and binding agent" (abstract). Titanium oxide is disclosed as the metal oxide used (column 1, lines 17-19). Additionally, "the substrate or core particles may be organic powders or inorganic powders of various shapes, including mica and synthetic fluorphlogopite mica" (column 3, lines 7-14).

Furthermore, "the fine particles of metal oxides are metal oxide particles having a mean particle size which is at most one-tenth of the mean particle size of the substrate particles. For use as UV screeners in cosmetic compositions, micronized particles of metal oxides must have an average particle size of less than 100 nm to be effective in minimizing the penetration of UV rays" (column 3, lines 21-27).

Additionally, the particles may be used to formulate non-pressed powders, lipsticks, creams, lotions and aerosol sprays (column 8, lines 51-55).

Miyoshi does not disclose the use of Fe_2O_3 or a mixture of $\text{Fe}_2\text{O}_3/\text{TiO}_2$ to coat the mica particles.

Kimura discloses a red pigment used in cosmetic formulations comprising an iron oxide plate type particle (abstract). The plate type particle may be mica and is coated with iron oxide (column 2, lines 46-55). The optical thickness of the iron oxide layer is 60-350nm (column 3, lines 6-9).

The instant claims differ from the reference only in the specific thickness of the coating agent. However, it would have been deemed prima Facie obvious to one having ordinary skill in the art at the time of the invention to optimize the thickness of the layer in order to provide a composition with desired UV protection sought. Determination of a

specific percentage having the optimum therapeutic effect is well within the level of one having ordinary skill in the art, and the artisan would be motivated to determine optimum amounts to get the maximum effect of the active compounds. Therefore, the invention as a Whole has been prima facie obvious to one of ordinary skill in the art at the time the invention was made.

Response to Arguments

Applicant's arguments have been fully considered but they are not persuasive. Applicant argues Kimura refers to a *red pigment* consisting of flat particles (which may be mica particles) with an iron oxide layer of 60-350 nm, and an aluminum-based layer *outside* of the iron oxide layer of 150-500 nm. However, both these references lack a teaching that the outermost layer of the respective particles has an outermost layer which is Fe₂O₃ or a mixture of Fe₂O₃/TiO₂. The examiner points out the Kimura reference disclosure was relied on for the showing of the specific iron oxide claimed in a cosmetic formulation, whereas Miyoshi discloses the particular structure of the particles. Furthermore, the coloring of the particle disclosed by Kimura does not render the combination unobvious since the claim is drawn to a composition, therefore intended function does not hold patentable weight.

It is unclear to the examiner where applicant has found support for the assertion that Miyoshi does not disclose the outermost layer having the metal oxide present. Applicant has not provided any citation within the document for such support and the examiner has pointed to passages within the body of the rejection wherein the metal oxide is coated onto the particle.

Claims 50-52, 54-55, 57-58 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. (EP 0 998 901 A1). In view of Kimura et al. (US Patent 5,522,923).

Ogawa discloses, a makeup cosmetic composition comprising photo chromic titanium oxide coated mica (abstract). Ogawa further discloses, "the layer thickness of titanium oxide layer, is adjusted in order that color tone of the interference color that is generated by titanium oxide layer may show different color with the objected color" (paragraph 0011) and "the layer thickness of titanium oxide layer is adjusted in order that color tone of the interference color that is generated by titanium oxide layer may shows a complementary color or color gamut in the vicinity of the complementary color of the object color " (paragraph 0012).

The titanium oxide coated mica is present in the amount of 0.1-30% (paragraph 0017).

The cosmetic composition further may comprise "water; powders, including various blue pigments; oils, including hydrocarbon oils; surfactants; lower alcohols; polyhydroxy alcohols, humectants, antiseptics, polymers, antioxidants, ultraviolet absorbents, and fragrances" (paragraph 0044).

Ogawa does not disclose the use of Fe_2O_3 or a mixture of $\text{Fe}_2\text{O}_3/\text{TiO}_2$ to coat the mica particles.

Kimura discloses a red pigment used in cosmetic formulations comprising an iron oxide plate type particle (abstract). The plate type particle may be mica and is coated

with iron oxide (column 2, lines 46-55). The optical thickness of the iron oxide layer is 60-350nm (column 3, lines 6-9).

The instant claims differ from the reference only in the specific thickness of the coating agent. However, it would have been deemed *prima Facie* obvious to one having ordinary skill in the art at the time of the invention to optimize the thickness of the layer in order to provide a composition with desired UV protection sought. Determination of a specific percentage having the optimum therapeutic effect is well within the level of one having ordinary skill in the art, and the artisan would be motivated to determine optimum amounts to get the maximum effect of the active compounds. Therefore, the invention as a Whole has been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Claims 50-52, 54-55, 57-58 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. (EP 0 998 901 A1). in view of Kimura et al. (US Patent 5,522,923) and further in view of Haning et al. (US Patent 6,042,619).

The combined teachings of Ogawa and Kimura are discussed above and applied in the same manner.

Ogawa and Kimura do not disclose the use of pearlescent optional ingredients.

Haning discloses a hair treatment composition comprising metal oxide coated particles and optional pearlescent ingredients including ethylene glycol distearate;

preservatives such as benzyl alcohol, methyl paraben, propyl paraben and imidazolidinyl urea (column 6, lines 15-18).

It is generally considered to be prime facie obvious to combine compounds each of which is taught by the prior art to be useful for the same purpose in order to form a composition that is to be used for an identical purpose. The motivation for combining them flows from their having been used individually in the prior art, and from them being recognized in the prior art as useful for the same purpose. As shown by the recited teachings, instant claims are no more than the combination of conventional components of cosmetic formulations. It therefore follows that the instant claims define prime facie obvious subject matter. Cf. In re Kerhoven, 626 F.2d 848, 205 USPQ 1069 (CCPA 1980).

Response to Arguments

Applicant's arguments have been fully considered but they are not persuasive. Applicant has addressed the above 2 rejections together. Applicant states unexpected results have been obtained and refer to figures 7 and 9. However, the examiner has not considered a method of reducing the transmittance of UV light as providing unexpected results of the composition.

Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyoshi et al. (US Patent 5,968,531) in view of Kimura et al. (US Patent 5,522,923) and further in view of Haning et al. (US Patent 6,042,619).

The combined teachings of Miyoshi and Kimura are discussed above and applied in the same manner.

Miyoshi and Kimura do not disclose the use of pearlescent optional ingredients.

Haning discloses a hair treatment composition comprising metal oxide coated particles and optional pearlescent ingredients including ethylene glycol distearate; preservatives such as benzyl alcohol, methyl paraben, propyl paraben and imidazolidinyl urea (column 6, lines 15-18).

It is generally considered to be prime facie obvious to combine compounds each of which is taught by the prior art to be useful for the same purpose in order to form a composition that is to be used for an identical purpose. The motivation for combining them flows from their having been used individually in the prior art, and from them being recognized in the prior art as useful for the same purpose. As shown by the recited teachings, instant claims are no more than the combination of conventional components of cosmetic formulations. It therefore follows that the instant claims define prime facie obvious subject matter. Cf. In re Kerhoven, 626 F.2d 848, 205 USPQ 1069 (CCPA 1980).

Response to Arguments

Applicant's arguments have been fully considered but they are not persuasive. Applicant argues Claim 56 is dependent upon claim 67 as the comments provided above also apply here. In addition, the use of Haning is also in the category of improper picking and choosing, i.e. there is no reason to select the particular element of pearlescent appearance for combination with Miyoshi and Kimura when making the as a

whole analysis of Haning (i.e. the optional pearlescent ingredients are for the combination of directed to *quaternary amine polymers* with a metal containing pigment; none of Miyoshi or Kimura use a quaternary amine polymer in their product). The examiner disagrees with Applicants assertions and conclusions. It is the position of the examiner that Haning discloses the use of pearlescent agents in their cosmetic formulation; therefore, it would have been obvious to a person of ordinary skill in the art to incorporate the agents into any cosmetic formulation with the desired effect of obtaining a pearlescent property.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Application/Control Number:
10/507,247
Art Unit: 1615

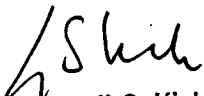
Page 11

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa S. Mercier whose telephone number is (571) 272-9039. The examiner can normally be reached on 7:30am-4pm Mon through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MSMercier


Gollamudi S. Kishore, PhD
Primary Examiner,
Group 1600